

Secs. 14-305 - 14-325. Reserved.

ARTICLE VIII. STORM WATER MANAGEMENT AND EROSION CONTROL

Division 1. Introduction

Sec. 14-326. Authority for Ordinance.

This ordinance applies to land disturbing and land development activities on lands within the unincorporated boundaries and jurisdiction of Waukesha County and annexed lands and is adopted under the authority granted by 92.07(15), 59.693 and 281.33 Wisconsin Statutes.
(Ord. No. 152-147, 3/24/98)

Sec. 14-327. Findings of Fact.

(a) The Waukesha County Board finds that uncontrolled stormwater runoff and construction site erosion from land development and land disturbing activity has a significant impact upon water resources and the health, safety, general welfare of the community and diminishes the public enjoyment

and use of natural resources.

(b) Specifically, uncontrolled stormwater runoff can:

1. degrade physical stream habitat by increasing stream bank erosion, increasing stream bed scour, diminishing groundwater recharge and diminishing stream base flows;
2. diminish the capacity of lakes and streams to support fish, aquatic life, recreational and water supply uses by increasing loadings of nutrients and other urban pollutants;
3. alter wetland communities by changing wetland hydrology and by increasing pollutant loads;
4. reduce the quality of groundwater by increasing pollutant loading;
5. threaten public health, safety, property, and general welfare by overtaxing storm sewers, drainage ways and other minor drainage facilities;
6. threaten public health, safety, property, and general welfare by increasing major flood peaks and volumes;
7. undermine floodplain management efforts by increasing the incidence and levels of floodings.

(Ord. No. 152-147, 3/24/98)

Sec. 14-328. Definitions.

(a) *Applicant* means any landowner, land user(s), their agent or contractor responsible for submitting and carrying out the requirements of this ordinance. Applicant shall also mean any subsequent land owner to whom this ordinance applies.

(b) *Agricultural land use* means use of land for planting, growing, cultivating and harvesting of crops for human or livestock consumption and pasturing or yarding of livestock, including sod farms and tree nurseries.

(c) *Best management practice* means a practice, technique or measure that is an effective, practical means of preventing or reducing soil erosion and water pollution from runoff both during and after land development activities. These can include structural, vegetative or management practices.

(d) *Common plan of development or sale* means all lands included within the boundary of a certified survey or subdivision plat created for the purpose of development or sale of property where integrated multiple separate and distinct land developing activity may take place at different times and on different schedules.

(e) *County* means Waukesha County.

(f) *Department* means the staff of the Land Conservation Division of the Waukesha County Department of Parks and Land Use, organized under section 92.09 Wisconsin Statutes, or its designee.

(g) *Design storm* means a hypothetical discrete rainstorm characterized by a specific duration, temporal distribution, rainfall intensity, return frequency and total depth of rainfall.

(h) *Discharge Volume* means the quantity of runoff discharged from the land surface as the result of a rainfall event.

(i) *Erosion means* the detachment and movement of soil, sediment or rock fragments by water, wind, ice or gravity.

(j) *Erosion control plan* means a written description and detailed site plan of best management practices designed to meet the requirements of this ordinance submitted by the applicant for review and approval by the Department.

(k) *Groundwater enforcement standard* means a numerical value expressing the concentration of a substance in groundwater which is adopted under sec. 160.07 Wis. Stats. and NR 140.10, Wisconsin Administrative Code., or sec.160.09, Wis. Stats. and NR 140.12, Wisconsin Administrative Code.

(l) *Groundwater preventive action limit* means a numerical value expressing the concentration of a substance in groundwater which is adopted under sec. 160.15, Wis. Stats. and s. NR 140.10, 140.12 or 140.20, Wisconsin Administrative Code..

(m) *Impervious surface* means a surface through which rainfall does not infiltrate Rooftops, sidewalks, parking lots and street surfaces are examples of impervious surfaces.

(n) *Infiltration* means the process by which rainfall or surface runoff percolates or penetrates into the underlying soil.

(o) *Land Conservation Committee* means the statutory committee of the Waukesha County Board created under authority of s. 92.06 Wis. Stats. Or its designee. In Waukesha County the Land Use, Parks and Environment Committee (LUPE) fulfills the statutory obligation.

(p) *Land development activity* means the construction of buildings, roads, parking lots, paved and unpaved storage areas, patios, seawalls and similar facilities, but not including general maintenance of parking lots and drives.

(q) *Land disturbing activity* means any man-made change of the land surface, including removing vegetative cover, cutting of trees, demolition, excavating, filling and grading but not including agricultural land uses such as planting, growing, cultivating and harvesting of crops, growing

and tending of gardens and harvesting of trees, and tree nurseries.

(r) *Landowner* means any person holding title to or having an interest in land.

(s) *Land user* means any person operating, leasing, renting or having made other arrangements with the landowner by which the landowner authorizes use of his or her land.

(t) *Local municipality* means a town, county, village or city.

(u) *Maintenance agreement* means a legal document that is filed with the County Register of Deeds and which provides for long-term maintenance of stormwater management practices.

(v) *Non-storm discharge* means a discharge to the storm sewer system created by some process other than the runoff of rain.

(w) *Peak flow* means the maximum rate at which a unit volume of stormwater is discharge.

(x) *Pervious surface* means a surface that infiltrates rainfall during a large portion of the design rainfall event. Well managed lawns, fields and woodlands are examples of pervious surfaces.

(y) *Post-construction stormwater discharge* means any stormwater discharged from a site following the completion of land disturbing construction activity and final site stabilization.

(z) *Post-development condition* means the extent and distribution of land cover types, anticipated to occur under conditions of full development, that will influence rainfall runoff and infiltration.

(aa) *Pre-development condition* means the extent and distribution of land cover types present before the initiation of land development activity, assuming that all land uses prior to development activity are managed in an environmentally sound manner.

(bb) *Pre-treatment* means the treatment of stormwater prior to its discharge to the primary stormwater treatment practice in order to reduce pollutant loads to a level compatible with the capability of the primary practice.

(cc) *Residential development* means that which is created to house people, including the residential dwellings as well as all attendant portions of the development including laws, driveways, sidewalks, garages and access streets. This type of development includes single family, multi-family, apartment and trailer parks.

(dd) *Runoff* means the rainfall, snowmelt, dewatering or irrigation water flowing over the ground surface.

(ee) *Site* means the entire area of land disturbing or land development activity.

(ff) *Stabilize* means that vegetation is well established or other surfacing material is in place and the risk of further soil erosion is minimal.

(gg) *Stormwater Management Measure* means a practice, technique or measure to reduce the volume, peak flow rate or pollutants in stormwater including, but not limited to structural stormwater measures.

(hh) *Stormwater management plan* means a document that identifies what actions will be taken to reduce stormwater quantity and pollutant loads from land development activity to levels meeting the purpose and intent of this ordinance.

(ii) *Stormwater management system plan* is a comprehensive plan developed to address stormwater drainage and nonpoint source water pollution control problems under both existing and planned conditions within a logical planning area such as a watershed or subwatershed. Such a system plan is intended to establish objectives, standards and design criteria which can be used to evaluate alternatives and select a recommended plan.

(jj) *Stormwater runoff* means that portion of the precipitation falling during a rainfall event that runs off the surface of the land and into the natural or artificial conveyance or drainage network.

(kk) *Structural stormwater management measure* means a practice that is designed to control stormwater runoff pollutant loads, discharge volumes and peak flow discharge.

(ll) *Surface Waters* means all lakes, bays, rivers, streams springs, ponds wells, impounding reservoirs, marshes, watercourses, drainage systems and other surface water or groundwater, natural or artificial, public or private within Waukesha County.

(mm) *Wetland functional value* mans the type, quality, and significance of the ecological and cultural benefits provided by wetland resources, such as: flood storage, water quality protection, groundwater recharge and discharge, shoreline protection, fish and wildlife habitat, floral diversity, aesthetics, recreation and education.

(nn) *Working Day* means a calendar day, except Saturdays, Sundays and State and County recognized legal holidays.

(Ord. No. 152-147, 3/24/98)

Sec. 14-329. General Administration.

The Department is designated to administer and enforce the provisions of this ordinance. The

Department shall oversee the administration of this ordinance and issue permits and review erosion control plans as provided herein and make recommendations, where appropriate to the Waukesha County Land Conservation Committee and any other agency of the County Board or the Board of Adjustment, relative to matters related to erosion and sediment control and stormwater management. (Ord. No. 152-147, 3/24/98)

Sec. 14-330. Design Criteria, Standards and Specifications.

All construction site erosion control and stormwater management measures required to comply with this ordinance shall meet the design criteria, standards and specifications in the latest edition of the “Wisconsin Construction Site Best Management Practice Handbook” and the “Wisconsin Stormwater Manual” as published and amended from time-to-time by the State of Wisconsin Department of Natural Resources. Design criteria, standards and specifications for construction site erosion control and stormwater management measures not contained in the “Wisconsin Construction Site Best Management Practice Handbook” and the “Wisconsin Stormwater Manual” shall not be permitted unless approved by the Waukesha County Department of Parks and Land Use, Land Conservation Division. (Ord. No. 152-147, 3/24/98)

Secs. 14-331-345. Reserved.

Division 2. Construction Site Erosion Control

Sec. 14-346. Maintenance of Construction Site Erosion Control Measures.

All best management practices necessary to meet the requirements of this ordinance shall be maintained consistent with the maintenance standards contained in the “Wisconsin Construction Site Best Management Practice Handbook”. The applicant and any subsequent landowner shall be responsible for maintaining the best management practices during the period of land disturbing activity and land development activity on the site until the site is stabilized in a satisfactory manner to ensure adequate performance and to prevent off site damage.

Implementation of maintenance standards for best management practices that are not included in the “Wisconsin Construction Site Best Management Practice Handbook” Shall not be permitted unless prior approval is granted by the Waukesha County Land Conservation Committee. (Ord. No. 152-147, 3/24/98)

Sec. 14-347. Erosion Control Plan Content and Permit Application Submittal and Approval.

No person may commence a land disturbing or land development activity subject to this ordinance without receiving prior approval of an erosion control plan for the site and a permit from the Department. At least one landowner or land user controlling or using the site and desiring to undertake

a land disturbing or land development activity subject to this ordinance shall submit an application for a permit and an erosion control plan and pay a review fee to the Department. Submission of an application authorizes the Department to enter the site to obtain information required for the review of the erosion control plan.

(a) *Erosion Control Plans For Sites Of One Acre Or Less And All Single and Two-Family Residential Construction Projects* as set forth Comm 21.125 of the Wisconsin Uniform Dwelling Code. The erosion control plan for sites of land disturbing activity or land development activity of one acre or less and all single and two-family residential construction projects shall contain the following:

1. The location of existing and proposed dwellings, other buildings and improvements with respect to the property lines.
2. The direction of slopes before and after land disturbance or land development on the site.
3. A description of all temporary best management practices required by this ordinance and Wisconsin law. Other best management practices shall be implemented during construction as deemed necessary by the Department.
4. A site stabilization plan and time schedule.
5. Any other information deemed necessary by the Department.

(b) *Erosion Control Plans For Sites Of More Than One Acre.* The erosion control plan for sites of land disturbing activity or land development activity of more than one acre shall contain the following:

1. *Existing Site Map.* A map on a scale of at least 1 inch equals 100 feet showing the following existing conditions and immediate adjacent areas:
 - A. Site boundaries and adjacent lands which accurately identify site location;
 - B. Lakes, ponds, streams, wetlands, channels, ditches and other water courses on and immediately adjacent to the site;
 - C. 100 year floodplains and floodways;
 - D. Vegetative cover, types and location;
 - E. Location of natural drainage patterns on the site and immediately adjacent to the site and the size, slope and land cover of the up slope and downslope drainage areas, including peak discharge, velocities, direction and destination of flows;
 - F. Locations and dimensions of utilities, structures, roads, highways and paving;
 - G. Site topography at a minimum contour interval of two feet; and
 - H. Any other information deemed necessary by the Department.
2. *Site Development Plan.* A site development plan including:
 - A. Locations and dimensions of all proposed land disturbing and land development activities;
 - B. Locations and dimensions of all temporary soil or dirt stockpiles;
 - C. Locations and dimensions of all best management practices necessary to meet the requirements of this ordinance;

- D. Schedule of anticipated starting and completion date of each land disturbing or land development activity including the installation of site best management practices needed to meet the requirements of this ordinance;
- E. Provisions for maintenance of the best management practices during construction;
- F. Description of vegetation and other materials to be used to stabilize the site including a schedule for installation and maintenance; and
- G. Location and dimensions of stormwater management measures, including, but not limited to post development peak flows, drainage system dimensions and computations. Provide certification of all computations, designs and final construction by a registered professional engineer.

(c) *Plan Review And Permitting Process.*

1. *Department Requirements.* Within 30 working days of receipt of the application for a permit and erosion control plan and fee for sites of more than one acre of land disturbance or land development or within 10 working days of receipt of the application and erosion control plan and fee for sites of one acre or less of land disturbance or land development, the Department shall review the application and erosion control plan to determine if the requirements of this ordinance are met. The Department may request comments from other departments or agencies. If the requirements of this ordinance are met the Department shall approve the plan and issue a permit to the applicant.

If the requirements of the ordinance are not met the Department shall inform the applicant in writing of what additional information is needed to meet the requirements of the ordinance. Within 30 working days of receipt of needed information for sites of more than one acre or within 10 working days of receipt of needed information for sites of one acre or less, the Department shall again determine if the erosion control plan meets the requirements of this ordinance and inform the applicant in writing of approval and any conditions if applicable and issue a permit.

If the erosion control plan is not approved the Department shall inform the applicant in writing of the reasons for disapproval. If the Department fails to act within the timeline set within this section, the erosion control plan shall be deemed approved and the permit shall be issued.

(d) *Duration.* Permits and erosion control plan approvals shall be valid for a period of 180 days or the length of the building permit or other construction authorizations or until release of the financial guarantee as set forth in Section 2(B)(3)©), whichever is longer from the date of issuance. The Department may extend the period one or more times for up to an additional 12 months. The Department may require additional best management practices as a condition of the extension if they are necessary to meet the requirements of this ordinance.

(e) *Financial Guarantee.* The Department may require the applicant to furnish the County with a financial guarantee, the form and type of which shall be acceptable to the County prior to release of the

permit. The financial guarantee shall be in an amount determined by the Department to be the cost of constructing and installing the erosion and sediment control practices. A financial guarantee shall not be required of departments, boards, municipalities, commissions, public offices and corporations having the authority of Eminent Domain as defined under Chapter 32, Wisconsin Statutes.

The financial guarantee must be sufficient to cover all phases of the plan from the clearing and stockpiling operations to final grading, landscaping and maintenance and shall give the Waukesha County Department of Parks and Land Use, Land Conservation Division the authority to use the funds to complete the project if the applicant defaults or does not properly implement the approved plan. The financial guarantee may not be released until the site has been stabilized with vegetative cover, including vegetative cover required as a result of utility distribution system installation and the practice installation required as part of this ordinance has been certified as built by a licensed professional engineer.

The applicant may submit a joint financial guarantee between the municipality and the county designating the Department as the release agent for the erosion and sediment control provisions.

(f) *Grading and Maintenance Agreements.* A grading and maintenance agreement shall be recorded in the Waukesha County Register of Deeds office prior to issuance of any permits and shall be effective for a sufficient time period to perform the activities required, make the appropriate inspections and approve the final installation. The grading and maintenance agreement shall provide all information deemed appropriate by the Department, including the date of completion and a designation of the individual(s) or municipality responsible for maintenance of installed practices after release of the financial guarantee.

(g) *Erosion Control Plan Conditions.* All permits and approved erosion control plans shall require the applicant to:

1. Notify the Department within 2 working days of commencing any land disturbing or land development activity;
2. Notify the Department of completion of any control measures within one working day after their installation;
3. Obtain permission in writing from the Department prior to modifying the erosion control plan;
4. Install all best management practices as identified in the approved erosion control plan;
5. Maintain all road drainage systems and tracking provisions, stormwater drainage systems, control measures and other facilities identified in the erosion control plan;
6. Repair any siltation or erosion damage to adjoining surfaces and drainage ways resulting from land development or disturbing activities;
7. Inspect the best management practices after each rain of 0.5 inches or more and at least once each week and make needed repairs;
8. Allow the Department to enter the site for the purpose of inspecting compliance with the erosion control plan or for performing any work necessary to bring the site into compliance with the erosion control plan; and
9. Keep a copy of the erosion control plan on the site.

Sec. 14-348. Control of Erosion and Pollutants During Land Disturbance and Development Activities.

(a) *Applicability.* This section applies to any of the following sites of land development or land disturbing activities.

1. Those sites requiring a subdivision plat or certified survey.
2. Those sites providing for the construction of houses, accessory structures, commercial, industrial or institutional buildings or additions there to on lots of record having an affected surface area of 3,000 sq. feet or more and/or 400 cubic yards of excavation or fill material.
3. Those involving grading, removal of protective ground cover or vegetation, demolition, excavation, land filling or other land disturbing activity affecting a surface area of 3,000 square feet or more.
4. Those involving excavation or filling or a combination of excavation and filling affecting 400 cubic yards or more of dirt, sand or other excavation or fill material or in excess of 15 cubic yards in aggregate on sites within the jurisdiction of the Waukesha County Shoreland and Floodland Protection Ordinance.
5. Those sites involving the laying, repairing replacing or enlarging of an underground pipe facility for a distance of 300 feet or more.

(b) *Exemptions.* This ordinance does not apply to the following activities:

1. Land development or land disturbing activities conducted or contracted by departments, boards, municipalities, commissions, public offices and corporations having the authority of Eminent Domain as defined under Chapter 32, Wisconsin Statutes.
2. Those State funded or conducted sites involving street, highway, road or bridge construction activities, meeting requirements contained in the Department of Transportation, Department of Natural Resources Cooperative Agreement Memorandum of Understanding On Erosion Control.
3. Underground pipe or facility placement which is “plowed” into the ground outside areas of channelized runoff.

(c) *Erosion And Other Pollutant Control Requirements.* The following requirements shall be met on all sites covered by this ordinance:

1. *Temporary Best Management Practices.* The following temporary best management practices shall be used to control sediment where erosion of the site, including direct piles, during construction will result in sediment reaching surface waters, rights-of-way, public storm sewers or other off site areas:
 - A. Small drainage areas with overland flow less than one acre, shall require a filter fabric fence or equivalent best management practice placed along the downslope areas and along the sideslope areas as required.

- B. Drainage areas of one to two acres with concentrated or channelized flow, shall require a filter fabric barrier or equivalent best management practice placed downslope of the disturbed area.
 - C. Drainage areas of more than two acres to five acres with concentrated or channelized flow, shall require a sediment trap or equivalent best management practice placed downslope of the disturbed area.
 - D. Drainage areas of more than five acres with concentrated or channelized flow, shall require a sediment basin or equivalent best management practice placed downslope of the disturbed area.
 - E. Steep slopes, which are slopes of 12 or more percent, shall require use of additional best management practices.
 - F. Environmentally sensitive areas, which are sites within 1,000 feet of a lake or pond or 300 feet of a stream, wetland, channel, ditch, floodplain or other watercourse, may require use of additional best management practices.
- (d) *Site Stabilization.* The disturbed area shall be stabilized by seeding, sodding or other permanent means as set forth below:
- 1. For building sites, the disturbed areas shall be mulched or other best management practices utilized and approved by the Department within 7 days after foundation backfilling;
 - A.. For other sites, the disturbed area shall be stabilized according to the schedule and materials described in the erosion control plan; and,
 - B. When the disturbed area is properly stabilized by established vegetation or other permanent means, the temporary best management practices shall be removed.
- (e) *Tracking Prevention and Cleanup.* Each site shall have graveled roads, access drives and parking areas of sufficient width and length to prevent sediment from being traced onto public or private roadways. Sediment reaching a public or private road shall be removed by street cleaning before the end of each work day. Flushing may not be used unless the sediment will be controlled by a filter fabric barrier, sediment trap, sediment basin or equivalent best management practice.
- (f) *Drain Inlet Protection.* Downslope storm drain inlets shall be protected.
- (g) *Site Dewatering.* Water pumped from the site shall be treated by an appropriately sized filter fabric barrier, sediment trap sediment basin or equivalent best management practice. Water may not be discharged in a manner that causes erosion or damage of the site, adjacent properties or receiving channels.
- (h) *Sediment Cleanup.* All off-site sediment deposits occurring as a result of construction activities shall be cleaned up at the end of the work day.
- (i) *Waste and Material Management and Disposal.* All waste and unused building materials

shall be properly managed and disposed of to prevent pollutants and debris from being carried by runoff off the site.

(j) *Soil or Dirt Storage Piles.* Soil or dirt storage piles shall be located at least twenty-five (25) feet from any downslope road, lake, stream, wetland, ditch, channel or other watercourse and protected in accordance with subsection G(b2) of this section. Piles located in the street or within twenty-five (25) feet of any downslope road, lake, stream, wetland, ditch, channel, floodplain or other watercourse shall require the use of additional best management practices.

(k) The proposed surface water runoff shall not be diverted so as to concentrate flow directly onto adjacent property or adversely affect adjoining property.
(Ord. No. 152-147, 3/24/98)

Secs. 14-349 - 14-354. Reserved.

Division 3. Stormwater Management

Sec. 14-355. Intent.

The Waukesha County Board recognizes that the preferred method of addressing stormwater management problems and needs is through the preparation of comprehensive stormwater management system plans for logical subwatershed areas which are designed to meet the purpose and intent of this ordinance. Accordingly, the standards for onsite stormwater management measures set forth in Sec. 14-358 do not apply in areas where such plans have been prepared. In those areas for which stormwater management system plans have been prepared, all land development activities will include stormwater management measures set forth in those approved stormwater management system plans. It is the general intent of Waukesha County Department of Parks and Land Use in cooperation with local municipal engineers to achieve its purpose through:

1. managing long-term, post-construction stormwater discharges from land development activities;
2. providing two options for developing stormwater management requirements including:
 - A. application of generic requirements in this ordinance on a site by site basis in areas for which no approved stormwater management system plan exists; and
 - B. implementation of management practices set forth in detailed stormwater management plans in areas which are covered by stormwater management system plan.

(Ord. No. 152-147, 3/24/98)

Sec. 14-356. Applicability.

(a) *Applicability.* The stormwater management provisions apply to land development activities which meet the applicability criteria specified in this section. The stormwater management provisions

also apply to land development activities that are smaller than the minimum applicability criteria if such activities are part of a larger integrated common plan of development or sale that meets the following applicability criteria, even though the land development activities may take place at different times on different schedules.

1. residential land development with a gross aggregate area of 5 acres or more;
2. residential land development with a gross aggregate area of least 3 acres, but less than 5 acres, if there are at least 1.5 acres of impervious surfaces;
3. land development, other than a residential land development, with a gross aggregate area of 1.5 acres or more or any nonresidential land development which creates impervious area of .5 acres or more.
4. land development activities regardless of size of the development, which in the opinion of the Department are likely to result in stormwater runoff which exceeds the safe capacity of the existing drainage facilities or receiving body of water, which causes undue channel erosion, which increases water pollution by scouring or causes the transportation of particulate matter or which endangers downstream property or public safety.

(Ord. No. 152-147, 3/24/98)

Sec. 14-357. Design Criteria, Standard and Specifications.

(a) All stormwater management measures required to comply with this section of the ordinance shall meet the design criteria, standards and specifications in the latest edition of the “Wisconsin Stormwater Manual” as published and amended from time-to-time by the State of Wisconsin Department of Natural Resources. Design criteria, standards and specifications for stormwater management measures not contained in the “Wisconsin Manual” shall not be permitted unless approved by the Department in cooperation with the local municipal engineer.

(b) *Water Quality Components.* The following methods shall be used in designing components of stormwater structures needed to meet the water quality standards of this ordinance:

1. Runoff volumes and peak flow rates used in designing the water quality components of stormwater structures shall be calculated using the “Small Storm Hydrology” method set forth in the latest edition of the “Wisconsin Stormwater Manual, Part 2: Technical Design Guidelines for Stormwater BMP’s” as published and amended from time-to-time by the State of Wisconsin Department of Natural Resources.

(c) *Water Quantity Components.* The following methods shall be used in designing components of stormwater structures needed to meet the water quantity standards of this ordinance:

1. Peak flow shaving components of stormwater structures shall be designed in accordance with standard engineering practice.
2. Runoff volumes and peak flow rates used in designing the water quantity components of stormwater structures shall be based on the principles of the document entitled “Urban Hydrology for Small Watersheds” (Technical Release 55: Engineering Division, United

States Department of Agriculture, June 1992). Natural Resource Conservation Service or other methods approved by the Department.
(Ord. No. 152-147, 3/24/98)

Sec. 14-358. Stormwater Management Standards.

(a) *Stormwater Discharge Quantity.* Unless otherwise provided for in this ordinance, all land development activities subject to this ordinance shall establish on-site management measures to control the peak flow rates of stormwater discharged from the site. Infiltration of stormwater runoff from driveways, sidewalks, rooftops, and landscaped areas shall be incorporated to the maximum extent technically and financially practical to provide volume control in addition to control of peak flows.

(b) On-site management measures shall be used to meet the following minimum performance standards:

1. The peak flow rates of stormwater runoff from the development shall not exceed those calculated for the series of design storms specified in sub. 2, below, occurring under development conditions specified in sub 3, below. Discharge velocities must be non-erosive to discharge locations, outfall channels, and receiving streams.
2. At a minimum, the 2 year, the 10 year, and 100 year rainfall events shall be used in comparing peak flow discharge rates for pre-development and post-development conditions.
3. When the Natural Resource Conservation Service TR-55 Method is used to calculate peak flow discharge rates and runoff volumes for the pre-development condition, NRCS curve numbers shall not exceed the following for the given soil hydrologic groups. When other methods for computing runoff are used, they shall assume a comparable pre-development condition.

Soil Hydrologic Group	A	B	C	D
NRCS Curve Number for Meadow	30	58	71	78
NRCS Curve Number for Woodland	30	55	70	77
NRCS Curve Number for Agricultural Lands	58	72	81	85
NRCS Curve Number for Paved Roadways w/Open Ditches	83	89	92	93
NRCS Curve Number for Commercial/Business Districts 85% Impervious	89	92	94	95
NRCS Curve Number for Industrial Districts 72% Impervious	81	88	91	93

4. Stormwater discharges to wetlands may be appropriate when the increase or decrease in

runoff volumes do not negatively change the wetland functional values. Where such changes are proposed, the impact of the proposal on wetland functional values shall be assessed using a methodology acceptable to the Department. Significant degradation to wetland functional values shall be avoided.

(c) *Stormwater Discharge Quality.* Unless otherwise provided for in this ordinance, all land development activities subject to this ordinance shall establish on-site management measures to control the quality of stormwater discharged from the site. On-site management measures shall be used to meet the following minimum standard:

1. Stormwater discharges shall be designed to remove, on an average annual basis, a minimum of 80% of the total suspended solids load. To achieve this level of control, stormwater practices shall be designed to accommodate, at a minimum, the runoff volume resulting from 1.5 inches of rainfall over a 4 hour period and control of particulates which are 5 microns or larger in size.
2. Discharge of urban stormwater pollutants to natural wetlands may be appropriate when the discharge does not negatively change the wetland functional value. Where such discharges are proposed, the impact of the proposal on wetland functional values shall be assessed using a method acceptable to the Department. Significant degradation to wetland functional values shall be avoided.
3. Stormwater discharges shall be treated as necessary prior to infiltration to prolong the life of the infiltration practice and to prevent discharge of stormwater pollutants at concentrations that will result in exceedances of groundwater preventive action limits or enforcement standards established by the Department of Natural Resources in NR 140 Wisconsin Administrative Code.
4. Stormwater ponds and infiltration devices shall not be located closer to water supply wells than indicated below without first notifying the Department.
 - i. 100 feet from a well servicing a private water system or a transient, non-community public water system;
 - ii. 1,200 feet from a well serving a municipal public water system, an other-than municipal public water system, or a non-transient non-community public water system.
 - iii. the boundary of a recharge area to a wellhead identified in a wellhead area protection plan;
5. Land development activities with stormwater runoff reaching Outstanding or Exceptional Resource Waters as identified in Chapter NR 102 Wisconsin Administrative Code may require use of additional on-site management measures.

(d) *Exceptions.* The requirements for onsite stormwater management measures established in this ordinance are not applicable in areas which are determined by the Department to be covered by stormwater management system plan which was developed as an alternative stormwater management planning approach to carry out onsite measures consistent with the purpose and intent of this ordinance.

In such cases the recommendations of the stormwater management system plan shall be applied either through the installation of stormwater management provisions recommended to be included on the development site being considered and/or through the payment of a fee as set forth in sub. (e). These minimum requirements may also be waived in whole or in part by the Department in cooperation with the local municipal engineer upon written request of the applicant, provided that at least one of the following conditions applies.

1. Provisions are made to manage stormwater by an off-site facility. This requires that the off-site facility is in place and is designed and adequately sized to provide a level of stormwater control that is equal to or greater than that which would be afforded by application of the standards of this ordinance.
2. The Department in cooperation with the local municipal engineer finds that meeting the minimum on-site management requirements are infeasible due to space or site restrictions.

(e) *Fee in Lieu of On-site Stormwater Management Practices.* Where the Department in cooperation with the local municipal engineer waives all or part of the minimum on-site stormwater management requirements or where the waiver is based on the provision of adequate stormwater facilities provided by the local municipality downstream of the proposed development, the applicant may be required to pay a fee set by the [administering authority]. In setting the fee for land development projects, the local municipality shall consider an equitable distribution of the cost of land, engineering design, construction and maintenance, as set forth in Section 66.0617, Wisconsin Statutes.

(f) *General Considerations for On-site and Off-site Stormwater Management Measures.* The following considerations shall be observed in managing stormwater runoff.

1. Natural topography and land cover features such as natural swales, natural depressions, native soil infiltrating capacity and natural groundwater recharge areas shall be preserved and used for stormwater infiltration and conveyance, to the extent possible, to meet the requirements of this section.
2. Emergency overland flow for all stormwater facilities shall be provided to prevent exceeding the safe capacity of downstream drainage facilities and prevent endangerment of downstream property or public safety.

(Ord. No. 152-147, 3/24/98)

Secs. 14-359 - 369. Reserved.

Division 4. Permitting

Sec. 14-370. Permitting Requirements and Procedures.

(a) *Permit Required.* No land owner or land operator may undertake a land development activity subject to this ordinance without receiving a permit from the Department prior to commencing the proposed activity.

(b) *Permit Application and Fee.* Unless specifically excluded by this ordinance, any land owner or operator desiring a permit shall submit to the Department a permit application made on a form provided by the Department for that purpose.

1. Unless otherwise excepted by this ordinance, a permit application must be accompanied by the following in order that the permit application be considered by the [Department] a stormwater management plan under Section 14-371; a maintenance agreement under Section 14-372; any payment of “fees in lieu” prior to permit issuance, as provided for under Section 14-358 and a non-refundable permit administration fee.
2. The stormwater management plan shall be prepared to meet the requirements of Sec.14-371 of this ordinance, the maintenance agreement shall be prepared to meet the requirements of Sec. 14-372 of this ordinance and fees shall be those established by the Department as set forth in Sec. 14-372 of this ordinance.

(c) *Review and Approval of Permit Application.* The Department in cooperation with the local municipal engineer shall review any permit application that is submitted with a stormwater management plan, maintenance agreement and the required fee. The following approval procedure shall be used:

1. Within 30 working business days of the receipt of a complete permit application, including all items as required by Sec. 14-370(b), the Department shall inform the applicant in writing whether the application, plan and maintenance agreement are approved or disapproved. The Department in cooperation with the local municipal engineer shall base the decision on requirements set forth in Sec. 14-371 of this ordinance.
2. If the stormwater permit application, plan and maintenance agreement are approved, the Department shall issue the permit.
3. If the stormwater permit application, plan or maintenance agreement are disapproved, the Department shall detail in writing of the reasons for disapproval.
4. If additional information is submitted, the Department shall have 30 working days from the date the additional information is received to inform the applicant whether the plan and maintenance agreement are either approved or disapproved.
5. Failure by the Department to inform the permit applicant of a decision within 30 working days of a required submittal shall be deemed to mean approval of the submittal and the applicant may proceed as if a permit had been issued.

(d) *Permit Conditions.* All permits issued under this ordinance shall be subject to the following conditions and holders of permits issued under this ordinance shall be deemed to have accepted these conditions. The Department may suspend or revoke a permit for violation of a permit condition, following written notification of the permittee. An action by the Department to suspend or revoke this permit may be appealed in accordance with Sec. 14-377 of this ordinance.

1. Compliance with this permit does not relieve the permit holder of the responsibility to comply with other applicable federal, state and local laws and regulations.
2. The permit holder shall design, install and maintain all structural and non-structural stormwater management measures in accordance with the approved stormwater

management plan, maintenance agreement and the permit.

3. The permit holder shall notify the Department at least two working days before commencing any work in conjunction with the stormwater management plan and within one working day upon completion of the stormwater management measures. If required as a special condition, the permit holder shall make additional notification according to a schedule set forth by the Department in cooperation with the local municipal engineer, so that practice installations can be inspected during construction.
4. Completed structural water management measures must pass a final inspection to determine if they are in accordance with the approved stormwater management plan and ordinance. The administering authority shall notify the permit holder in writing of any changes required in such practices to bring them into compliance with the conditions of this permit. The practice installation required as part of this ordinance shall be certified as built by a licensed professional engineer.
5. The permit holder shall notify the Department and local municipal engineer of any significant modifications it intends to make to an approved stormwater management plan. The Department in cooperation with the local municipal engineer may require that the proposed modifications be submitted for approval prior to incorporation into the stormwater management plan and execution.
6. The permit holder shall maintain all stormwater management measures specified in the approved stormwater management plan until the measures either become the responsibility of the local municipality or are transferred to subsequent private owners as specified in the approved maintenance agreement.
7. The permit holder authorizes the Department and local municipality to perform any work or operations necessary to bring stormwater management measures into conformance with the approved stormwater management plan, and consents to placing associated costs upon the tax roll as a special lien against the property or to charging such costs against the performance bond posted for the project.
8. If so directed by the Department in cooperation with the local municipal engineer the permit holder shall repair at the permit holder's own expense all damage to adjoining municipal facilities and public drainage ways caused by stormwater runoff from the permit holder's site, where such damage is caused by activities that are not in compliance with the approved stormwater management plan.
9. The permit holder shall permit property access to the Department and local municipal engineer for the purpose of inspecting the property for compliance with the approved stormwater management plan and this permit.
10. Where a stormwater management plan involves changes in direction, increases in peak rate and/or total volume of runoff off of a site, the Department in cooperation with the local municipal engineer may require the permittee to make appropriate legal arrangements with adjacent property owners concerning the prevention of endangerment to downstream property or public safety.
11. The permit holder is subject to the enforceable actions detailed in Section 14-376 of this

ordinance if the permit holders fails to comply with the terms of this permit.

(e) *Permit Duration.* Permits and stormwater management plan approvals shall be valid for a period of 180 days, or the length of the building permit or other construction authorizations, or until release of the financial guarantee as set forth in Section 14-373, whichever is longer from the date of issuance. The Department may extend the period one or more times for up to an additional 12 months. (Ord. No. 152-147, 3/24/98)

Sec. 14-371. Stormwater Management Plans.

(a) *Plan Requirements.* The stormwater management plan required under Sec. 14-370 of this ordinance shall contain the following information:

1. Name, address, and telephone number for the following on their designees: landowner; developer; project engineer for practice design and certification; person(s) responsible for installation of stormwater management measures; person(s) responsible for maintenance of stormwater management measures prior to the transfer, if any, of maintenance responsibility to another party.
2. A proper description of the property proposed to be developed referenced to the U.S. Public Land Survey system or to block and lot numbers within a recorded land subdivision plat.
3. Pre-development site conditions, including:
 - A. A site map, at a scale of not less than 1 inch equals 100 feet. The site map shall show the following: site location and legal property description; predominant soil types and hydrologic soil groups; existing cover type and condition; topographic contours of the site at a scale not to exceed two foot contour interval; topography and drainage network including enough of the contiguous properties to show runoff patterns onto, through and from the site; watercourses that may affect or be affected by runoff from the site; flow path and direction for all stormwater conveyance sections, including time of travel and time of concentration applicable to each; watershed boundaries used in determinations of peak flow discharge rates and discharge volumes from the site; lakes, streams, wetlands, channels, ditches and other watercourses on and immediately adjacent to the site; limits of the 100 year floodplain; location of wells located within 1,200 feet of stormwater detention ponds, infiltration basins or infiltration trenches; delineation of wellhead protection areas delineated pursuant to NR 811.16 Wis. Admin. Code.
 - B. Computations of the peak flow discharge rates and discharge volumes, from each discharge point in the development. At a minimum, computations must be made for the following storms: 2-year, 10-year, 100-year. All major assumptions used in developing input parameters shall be clearly stated. The areas used in making the calculations shall be clearly cross-referenced to the required map(s).
4. Post-development site conditions, including:

- A. Explanation of any restrictions on stormwater management measures in the development area imposed by wellhead protections plans and ordinances.
 - B. A site map at a scale of not less than 1 inch equals 100 feet showing: revised pervious land use including vegetative cover type and condition; impervious land use including all buildings, structures, and pavement; revised topographic contours of the site at a scale not to exceed two feet; revised drainage network, including enough of the contiguous properties to show runoff patterns onto, through and from the site; locations and dimensions of drainage easements; locations of maintenance easements specified in the maintenance agreement; flow path and direction for all stormwater conveyance sections, including time of travel and time of concentration applicable to each; location and type of all stormwater management conveyance and treatment practices, including the on-site and off-site tributary drainage area; location and type of conveyance system that will carry runoff from the drainage and treatment practices to the nearest adequate outlet such as a curbed street, storm drain or natural drainage way; watershed boundaries used in determinations of peak flow discharge rates and discharge volumes; any changes to lakes, streams, wetlands, channels, ditches and other watercourses on and immediately adjacent to the site.
 - C. Computations of the peak flow discharge rates and discharge volumes, from each discharge point in the development, including analysis of the safe capacity of downstream drainage conveyance systems. At a minimum, computations must be made for the following storms: 2-year, 10-year, 100-year. All major assumptions used in developing input parameters shall be clearly stated. The areas used in making the calculations shall be clearly cross-referenced to the required map(s).
 - D. Investigations of soils and groundwater required for the placement and design of stormwater management measures.
 - E. Results of impact assessments on wetland functional values.
 - F. Design computations and all applicable assumptions for stormwater conveyance (open channel, closed pipe) and stormwater treatment measures (sedimentation type, filtration-type, infiltration-type) as needed to show that practices are appropriately sized and capable of meeting the discharge performance standards of this ordinance.
 - G. Detailed drawings including cross-sections and profiles of all permanent stormwater conveyance and treatment measures.
- 5. A stormwater measure installation schedule.
 - 6. A maintenance plan developed for the life of each stormwater management measure including the required maintenance activities and maintenance activity schedule.

(b) *Exceptions.* The Department in cooperation with the local municipal engineer may prescribe alternative submittal requirements for applicants seeking an exemption to on-site stormwater management performance standards under Sec. 14-358(c) of this ordinance.

(c) *Waivers.* The Department in cooperation with the local municipal engineer

may waive some of the requirements of Sec.14-371 to accommodate smaller scale projects.
(Ord. No. 152-147, 3/24/98)

Sec. 14-372. Maintenance.

(a) *Maintenance Agreement Required.* The maintenance agreement required for stormwater management measures under Sec. 14-370(b)(1) of this ordinance shall be an agreement between the local municipality and the permittee. The agreement or recordable document shall be recorded with the County Register of Deeds so that it is binding upon all subsequent owners of land served by the stormwater management measures.

- (b) *Agreement Provisions.* The maintenance agreement shall contain the following provisions:
1. Identification of the landowner(s), organization or municipality responsible for maintenance of the stormwater management measures.
 2. The landowner(s), organization or municipality shall maintain stormwater management practices in accordance with the stormwater practice maintenance provisions contained in the approved stormwater management plan submitted under Section 3 (F) of this ordinance.
 3. The local municipality is authorized to access the property to conduct inspections of stormwater practices as necessary to ascertain that the practices are being maintained and operated in accordance with the approved stormwater management plan.
 4. A schedule for regular maintenance of each aspect of the property's stormwater management system.
 5. That if the local municipality notifies the party designated under the maintenance agreement of maintenance problems which require correction, the specified corrective actions shall be taken within a reasonable time frame as set by the local municipality.
 6. The local municipality is authorized to perform the corrected actions identified in the inspection report if the landowner does not make the required corrections in the specified time period. The costs and expenses shall be entered on the tax roll as a special charge against the property and collected with any other taxes levied thereon for the year in which the work is completed.
 7. Identification of the structural stormwater measures design components and designation of the drainage area served by the measures.

(Ord. No. 152-147, 3/24/98)

Division 5. Financial Provisions

Secs. 14-373. Reserved.

Sec. 14-374. Fee Schedule.

The fees referred to in other sections of this ordinance shall be established administratively through the Waukesha County budget process. A schedule of the fees shall be available for review in the office of the Waukesha County Department of Parks and Land Use and the County Clerk.

(Ord. No. 152-147, 3/24/98)

Division 6. Enforcement and Appeals

Sec. 14-375. Inspection.

At any reasonable time and for any proper purpose, the Department is authorized to enter upon any land and make inspections to determine conformance with the terms of this ordinance and any permits or plan approvals pursuant to the provisions of section 66.0119, Wisconsin Statutes.

(Ord. No. 152-147, 3/24/98)

Sec. 14-376. Enforcement.

(a) The Department may post a stop-work order if:

1. Any land disturbing or land development activity regulated under this ordinance is occurring without a permit and an approved erosion control plan or
2. The conditions of the permit and approved erosion control plan are not being complied with.

(b) After posting a stop-work order, the Department may issue a notice of intent to the applicant or landowner or land user of its intent to perform work necessary to comply with this ordinance, permit or erosion control plan. If conditions are likely to result in sediment from the site damaging adjacent properties or reaching surface waters, the Department may enter the land and take emergency actions necessary to prevent sediment or other pollutants from damaging adjacent properties or reaching surface waters, public rights-of-ways and storm sewers. The costs incurred by the Department plus interest and legal costs shall be billed to the owner of title of the property.

(c) Any individual who violates this ordinance, the conditions of a permit granted pursuant to this ordinance or permits erosion, sediment deposits, tracking or deposition of soil on adjacent land, public right-of-ways or surface waters shall be deemed to be in violation of this ordinance and subject to the penalties provided herein.

1. Penalties: Any person, firm, company or corporation who violates, disobeys, omits, neglects, refuses to comply with or who resists the enforcement of any of the provisions of this ordinance, shall be subject to a fine of less than fifty dollars (\$50.00) and not to exceed the sum five hundred dollars (\$500.00) for each offense, together with the costs of the action and in default of the payment thereof, shall be imprisoned in the County Jail of Waukesha County, for a period of not to exceed six (6) Months or until such fine and the subsequent costs have been paid. Each day that a violation is permitted to exist shall

constitute a separate violation and be punishable as such.

2. Enforcement by injunction: Compliance with the provisions of this ordinance may also be enforced by injunction at the suit of the county or one (1) or more owners of real estate situated within an area affected by the regulations of this ordinance. It shall not be necessary to prosecute for fine or imprisonment before resorting to injunction proceedings.

(Ord. No. 152-147, 3/24/98)

Sec. 14-377. Appeals.

(a) *Establishment.* The Waukesha County Board of Adjustment created pursuant to Section 59.99 of the Wisconsin Statutes is hereby authorized to serve as the Board of Adjustment for considering appeals to this ordinance. The organization in terms of members and terms of office for that Board are set forth in the Waukesha County Zoning Code.

(b) *Rules.* The rules established for the Waukesha County Board of Adjustment as provided in the Waukesha County Zoning Code shall apply. In addition to cooperation with the Waukesha County Zoning Agency, the Board shall cooperate with the Waukesha County Land Conservation Committee and department staff and keep them informed as to any matters brought before it. It shall call upon that Committee or the department for such information as may be pertinent to the matters under consideration.

(c) *Powers.* The Board of Adjustment shall have the powers defined by Wisconsin Statutes and as follows:

1. To hear and decide appeals where it is alleged there is error in any order, requirement, decision or determination made by the Department in the enforcement of provisions of this ordinance or as provided in Section 59.693 of the Wisconsin Statutes.
2. To authorize upon appeal in specific cases such variances from the terms of this ordinance as will not be contrary to the public interest, where owing to special conditions a literal enforcement of the provisions of this Ordinance will result in practical difficulty or unnecessary hardship, so that the purpose of this ordinance shall be observed, public safety and welfare secured and substantial justice done.

(d) *How Filed.* Appeals to the Board of Adjustment may be taken by any person aggrieved or by any officer, department, board or bureau of the municipality affected by a decision of the Department or the Land Conservation Committee or other administrative officer. Such appeal shall be taken within twenty (20) days from the date of the decision of the Waukesha County Land Conservation Committee or the Department or other offices by filing with the Board of Adjustment, a notice of appeal specifying the grounds thereof, together with the proper fee as established by this ordinance. A copy of the appeal shall also be forwarded to the agency or department whose decision is being appealed. The officer whose decision is being appealed shall immediately transmit to the Board all the papers constituting the record upon which the action appealed from was taken.

(e) *Stay.* An appeal shall stay all legal proceedings in furtherance of the action appealed from, unless the officer from whose decision the appeal is taken certifies to the Board of Adjustment, after the notice of appeal shall have been filed, that by reason of facts stated in the certificate, a stay would, cause imminent peril to life or property. In such cases, proceedings shall not be stayed otherwise than by a restraining order, which may be granted by the Board of Adjustment or by a court of record on application, on notice to the officer from whom the appeal is taken and on due case shown.

(f) *Hearing.* Each appeal shall be heard within a reasonable time and not to exceed ninety (90) days from the time the appeal was filed with the Board. Notice of hearing shall be given by publishing in a newspaper of general circulation in the vicinity of the appeal at least once each week for two (2) consecutive weeks and not less than seven (7) days from the date of hearing. In addition, written notice shall be given to the Waukesha County Land Conservation Committee, the department, the county zoning administrator any other administrative officer appealed from and by certified mail to the petitioner, the clerk of the town wherein the affected lands are located, the owners or each parcel of land within one hundred (100) feet of the land in question and any other specifically interested parties. At the hearing any party may appear in person or by an agent or attorney.

(g) *Decision.* The decision on any appeal shall be made within fifteen (15) days after completion of the hearing thereon.

(h) *Additional Requirement.* In making its determination, the Board of Adjustment shall consider whether the proposed variance from the terms of this ordinance would be hazardous, harmful, noxious or offensive or a nuisance to the surrounding neighborhood or surface waters by reason of pollution or other physical, social or economic effects and may impose such requirements and conditions with respect to construction, location, maintenance and operation or best management practices in addition to any which may be stipulated in this ordinance as it may deem necessary and appropriate for the protection of adjacent properties and the public interest and welfare.

(i) *Performance Standards.* In order to reach a fair and objective decision, the board may utilize and give recognition to appropriate performance standards and methodologies which are available in model codes or ordinances or which may have been developed by planning, manufacturing, health, architectural, engineering, soil and agricultural agencies or other appropriate organizations.

(j) *Enforcement of Decision.* In exercising the above-mentioned powers, such Board may, in conformity with the provisions of this ordinance, reverse or affirm, wholly or partly, or may modify the order, requirements, decision or determination appealed from, and may make such order, requirement, decision or determination as ought to be made and to that end shall have all the powers of the officer or department official from whom the appeal is taken and may issue or direct the issue of a permit provided that no such action shall have the effect of permitting best management practices in contradiction to the purpose of this ordinance or the Wisconsin Statutes or cause pollution

or of granting variances to any other state, county or local ordinance.

(k) *Required Vote.* The concurring vote of three (3) members of the Board shall be necessary to reverse any order, requirement, decision or determination of any such administrative official, or to decide in favor of the applicant on any matters upon which it is required to pass under this ordinance, or to effect any variation therefrom. The grounds of every such determination shall be stated.

(l) *Further Appeal.* Any person or persons, jointly or severally, aggrieved by a decision of the Board of Adjustment or any taxpayer or any officer, department, board or bureau of the municipality, may appeal from a decision of the Board of Adjustment within thirty (30) days after the filing of the decision in the office of the Board of Adjustment in the manner provided in Section 59.694, Wisconsin Statutes.

(Ord. No. 152-147, 3/24/98)

Secs. 14-388 - 14-399. Reserved.